Continuous CCT: The FlexCCT Software and Associated Models

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The Cultural Consensus Theory (CCT) framework includes models for data pooling and consensus for continuous, ordinal, and dichotomous data. In this talk, we describe several models for CCT with continuous data. We describe the basic axioms of continuous CCT (Batchelder and Romney, 1989) and recent extensions for incorporating item easiness and reliability measures into the CCT models (France and Batchelder, 2015). We also describe extensions for cluster-wise and fuzzy cluster-wise CCT (France and Batchelder, 2014). We address issues involving model identifiability and describe software and estimation procedures for the models described in this paper. We show how bootstrap and jackknife confidence intervals can be created for CCT parameters. We demonstrate the FlexCCT software using ratings data from education, from sports, and from consumer reviews. We compare modeling and philosophical approaches with the Bayesian models described in Anders, Oravecz, and Batchelder (2014).

